



## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. FAA-2022-1166; Project Identifier MCAI-2022-00407-T; Amendment 39-22297; AD 2023-01-03]**

**RIN 2120-AA64**

#### **Airworthiness Directives; Airbus SAS Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule.

**SUMMARY:** The FAA is adopting a new airworthiness directive (AD) for all Airbus SAS Model A330-200, A330-200 Freighter, A330-300, A330-800, A330-900, A340-200, and A340-300 series airplanes. This AD was prompted by a determination that certain landing gear parts have been manufactured with improper material or using a deviating manufacturing process. This AD requires replacing each affected part with a serviceable part, and for certain airplanes, re-assessing any previously repaired main landing gear (MLG) sliding piston, as specified in a European Union Aviation Safety Agency (EASA) AD, which is incorporated by reference. This AD also limits the installation of affected parts under certain conditions. The FAA is issuing this AD to address the unsafe condition on these products.

**DATES:** This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:**

*AD Docket:* You may examine the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2022-1166; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the mandatory continuing airworthiness information (MCAI), any comments received, and other information. The address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

*Material Incorporated by Reference:*

- For material incorporated by reference in this AD, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 8999 000; email [ADs@easa.europa.eu](mailto:ADs@easa.europa.eu); website [easa.europa.eu](https://easa.europa.eu). You may find this material on the EASA website at [ad.easa.europa.eu](https://ad.easa.europa.eu).

- You may view this material at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available in the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2022-1166.

**FOR FURTHER INFORMATION CONTACT:** Vladimir Ulyanov, Aerospace Engineer, Large Aircraft Section, FAA, International Validation Branch, 2200 South 216th St., Des Moines, WA 98198; telephone 206-231-3229; email [vladimir.ulyanov@faa.gov](mailto:vladimir.ulyanov@faa.gov).

**SUPPLEMENTARY INFORMATION:**

**Background**

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to all Airbus SAS Model A330-200, A330-200 Freighter, A330-300, A330-800, A330-900, A340-200, and A340-300 series airplanes. The NPRM published in the *Federal Register* on September 19, 2022 (87 FR 57153). The

NPRM was prompted by AD 2022-0049, dated March 21, 2022, issued by EASA, which is the Technical Agent for the Member States of the European Union (EASA AD 2022-0049) (also referred to as the MCAI). The MCAI states that certain landing gear parts have been manufactured with improper material and/or using a deviating manufacturing processes. This condition, if not corrected, could lead to nose landing gear (NLG) or MLG structural fatigue failure and subsequent collapse of a landing gear, possibly resulting in damage to the airplane and injury to occupants.

In the NPRM, the FAA proposed to require replacing each affected part with a serviceable part, and for certain airplanes, re-assessing any previously repaired MLG sliding piston, as specified in EASA AD 2022-0049. The NPRM also proposed to limit the installation of affected parts under certain conditions. The FAA is issuing this AD to address possible NLG or MLG structural fatigue failure and subsequent collapse, which could result in damage to the airplane and injury to occupants.

## **Discussion of Final Airworthiness Directive**

### **Comments**

The FAA received a comment from The Air Line Pilots Association, International (ALPA) who supported the NPRM without change.

The FAA received an additional comment from American Airlines. The following presents the comment received on the NPRM and the FAA's response.

### **Request to Allow Maintenance Records Review for Identification of Affected Parts**

American Airlines (AAL) requested that operators be allowed to use a maintenance records review for identifying affected parts. AAL asserted that a maintenance records review is usually permitted for identifying affected parts "provided the part number and serial number of each component can be conclusively identified by that review." AAL added that it asked EASA about this issue and EASA stated that "...any method, which is acceptable to the NAA responsible for AD enforcing, is

acceptable” for determining whether a part is affected. AAL noted that it does not believe the EASA response allows FAA operators to use a maintenance records review.

The FAA agrees to clarify. This AD does not directly require determining whether or not a part is affected, but instead requires actions for airplanes that have an affected part installed and limits the installation of affected parts. Therefore, operators may use any method they choose, including a records review, for determining whether they have an affected part, provided the part number and serial number can be conclusively determined. Since the determination is not an AD requirement, the FAA has not changed this AD regarding this issue.

### **Conclusion**

This product has been approved by the aviation authority of another country and is approved for operation in the United States. Pursuant to the FAA’s bilateral agreement with this State of Design Authority, it has notified the FAA of the unsafe condition described in the MCAI referenced above. The FAA reviewed the relevant data, considered the comments received, and determined that air safety requires adopting this AD as proposed. Accordingly, the FAA is issuing this AD to address the unsafe condition on this product. Except for minor editorial changes, this AD is adopted as proposed in the NPRM. None of the changes will increase the economic burden on any operator.

### **Related Service Information under 1 CFR Part 51**

EASA AD 2022-0049 specifies procedures for replacing each affected part with a serviceable part before exceeding the applicable revised life limit, and, for airplanes with a previously repaired MLG sliding piston, re-assessing the repaired part, which involves obtaining and following instructions from the FAA, EASA, or Airbus SAS’s EASA Design Organization Approval (DOA). This material is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

## Costs of Compliance

The FAA estimates that this AD affects 128 airplanes of U.S. registry. The FAA estimates the following costs to comply with this AD:

### Estimated costs for required actions\*

Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Up to 49 work-hours X \$85 per hour = \$4,165 (per MLG)	Up to \$692,323 (per MLG)	Up to \$696,489 (per MLG)	Up to \$89,150,592
Up to 11 work-hours X \$85 per hour = \$935 (NLG)	Up to \$260,410	Up to \$261,346	Up to \$33,452,288

\*The FAA notes that not every MLG or NLG will need to be replaced on every airplane and that operators may have serviceable parts in stock, thereby reducing the costs on U.S. operators. Depending on the flight hours and landings on the landing gear, the FAA estimates that the replacement period for all affected MLG and NLG will be more than two years. Additionally, the FAA has received no definitive data on which to base the cost estimates for the re-assessment actions specified in this AD.

### Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

## **Regulatory Findings**

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Will not affect intrastate aviation in Alaska, and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

## **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

## **The Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new airworthiness directive:

**2023-01-03 Airbus SAS:** Amendment 39-22297; Docket No. FAA-2022-1166; Project Identifier MCAI-2022-00407-T.

#### **(a) Effective Date**

This airworthiness directive (AD) is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to all Airbus SAS airplanes identified in paragraphs (c)(1) through (7) of this AD, certificated in any category.

(1) Model A330-201, -202, -203, -223, and -243 airplanes.

(2) Model A330-223F and -243F airplanes.

(3) Model A330-301, -302, -303, -321, -322, -323, -341, -342, and -343 airplanes.

(4) Model A330-841 airplanes.

(5) Model A330-941 airplanes.

(6) Model A340-211, -212, and -213 airplanes.

(7) Model A340-311, -312, and -313 airplanes.

**(d) Subject**

Air Transport Association (ATA) of America Code 32, Landing gear.

**(e) Unsafe Condition**

This AD was prompted by a determination that certain landing gear parts have been manufactured with improper material or using a deviating manufacturing processes. The FAA is issuing this AD to address possible nose landing gear (NLG) or main landing gear (MLG) structural fatigue failure and subsequent collapse, which could result in damage to the airplane and injury to occupants.

**(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

**(g) Requirements**

Except as specified in paragraph (h) of this AD: Comply with all required actions and compliance times specified in, and in accordance with, European Union Aviation Safety Agency (EASA) AD 2022-0049, dated March 21, 2022 (EASA AD 2022-0049).

## **(h) Exceptions to EASA AD 2022-0049**

(1) Where the affected part and serviceable part definitions in EASA AD 2022-0049 refer to “the SB,” replace the text “the SB” with “Airbus Service Bulletin A330-32-3302, dated January 18, 2022; or Airbus Service Bulletin A340-4321, dated January 18, 2022; as applicable.”

(2) Where EASA AD 2022-0049 refers to its effective date, this AD requires using the effective date of this AD.

(3) The “Remarks” section of EASA AD 2022-0049 does not apply to this AD.

## **(i) Additional AD Provisions**

The following provisions also apply to this AD:

(1) *Alternative Methods of Compliance (AMOCs)*: The Manager, Large Aircraft Section, International Validation Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or responsible Flight Standards Office, as appropriate. If sending information directly to the Large Aircraft Section, International Validation Branch, send it to the attention of the person identified in paragraph (j) of this AD. Information may be emailed to: 9-AVS-AIR-730-AMOC@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the responsible Flight Standards Office.

(2) *Contacting the Manufacturer*: For any requirement in this AD to obtain instructions from a manufacturer, the instructions must be accomplished using a method approved by the Manager, Large Aircraft Section, International Validation Branch, FAA; or EASA; or Airbus SAS’s EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.



(3) *Required for Compliance (RC)*: Except as required by paragraph (i)(2) of this AD, if any service information contains procedures or tests that are identified as RC, those procedures and tests must be done to comply with this AD; any procedures or tests that are not identified as RC are recommended. Those procedures and tests that are not identified as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC, provided the procedures and tests identified as RC can be done and the airplane can be put back in an airworthy condition. Any substitutions or changes to procedures or tests identified as RC require approval of an AMOC.

**(j) Additional Information**

For more information about this AD, contact Vladimir Ulyanov, Aerospace Engineer, Large Aircraft Section, FAA, International Validation Branch, 2200 South 216th St., Des Moines, WA 98198; telephone 206-231-3229; email [vladimir.ulyanov@faa.gov](mailto:vladimir.ulyanov@faa.gov).

**(k) Material Incorporated by Reference**

(1) The Director of the Federal Register approved the incorporation by reference of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(i) European Union Aviation Safety Agency (EASA) AD 2022-0049, dated March 21, 2022.

(ii) [Reserved]

(3) For EASA AD 2022-0049, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 8999 000; email [ADs@easa.europa.eu](mailto:ADs@easa.europa.eu); website [easa.europa.eu](http://easa.europa.eu). You may find this EASA AD on the EASA website at [ad.easa.europa.eu](http://ad.easa.europa.eu).

(4) You may view this material at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

(5) You may view this material that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email [fr.inspection@nara.gov](mailto:fr.inspection@nara.gov), or go to: [www.archives.gov/federal-register/cfr/ibr-locations.html](http://www.archives.gov/federal-register/cfr/ibr-locations.html).

Issued on January 5, 2023.

Christina Underwood, Acting Director,  
Compliance & Airworthiness Division,  
Aircraft Certification Service.

[FR Doc. 2023-02007 Filed: 2/1/2023 8:45 am; Publication Date: 2/2/2023]